

MIAMI, FLA.

4/6/66. K. G. ... I ... K

CC: ...

FOMINA, P.I.; GLANTS, R.M.

Dynamic prothrombin test in infectious diseases in puerperium. Akush.  
gin., Moskva No.1:58-60 Jan-Feb 52. (GLML 21:4)

1. Docent for Fomina and Candidate Medical Sciences for Glants.
2. Of the Obstetric-Gynecological Clinic (Head--Prof. D.Ye. Shmundak)  
of Khar'kov Medical Institute and of the Donor Department of the  
Ukrainian Scientific-Research Institute for Blood Transfusion (Director  
Prof. A.L. Slobodskoy).

GLANTS, R.M.

Mechanism of hemostatic function of the blood. Vop. fiziol. no. 5:  
52-59 '53. (MIRA 8:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut perelivaniya  
krovi. Khar'kovskaya oblastnaya stantsiya perelivaniya krovi.  
(HEMOSTASIS, physiology)

GLANTS, R. M.

USSR/Medicine - Blood Transfusion

Jul/Aug 53

"Data on the Role of the Cerebral Cortex in the Pathogenesis of Reactions Occurring as a Result of Transfusion of Blood of Another Type," Prof A. L. Slobodskoiy, Sr Sci Assoc R. M. Glants, M. P. Brusnitsyna, V. P. Verbitskiy, Ukr Sci-Res Inst of Blood Transfusion; Ukr Inst for the Advanced Training of Physicians

Vest Khirurg, Vol 73, No 4, pp 9-13

Attributes severe post-transfusion reactions produced by blood of another type to changes in the dynamics of cortical processes. Assumes that  
272T23

a lessening of such reactions is closely connected with reinforcement of protective inhibitions of the cerebral cortex. Advocates the preliminary use of medicinal therapeutic sleep or intravenous injections of sodium bromide to allay, or even prevent, such reactions.

GLANTS, R.M.

"The Effect of Blood Transfusion on the Functional Conditions of the Thyroid Gland"  
p. 92, in the book Experience in the Use of Radioactive Isotopes in Medicine  
R. Ye. KAVETSKIY and I.T. SHEVCHENKO, published by the Gosmedizdat Publishing  
House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a  
conference held in KIEV from 18-20 January 1954.

So: 1100235

GIANTS, R.M., starshiy nauchnyy sotrudnik.

Studying the mechanism of the action of transfused blood on the basis  
of the cortico-visceral reflex theory. Vop.perel.krovi 4:7-18 '55.

(BLOOD--TRANSFUSION)

(MIRA 9:12)

(CEREBRAL CORTEX)

GIANTS, R.M., starshiy nauchnyy sotrudnik

Controlling the therapeutic effects of transfused blood. Vop.perep.  
krovi 4:51-57 '55. (MLRA 9:12)

(BLOOD--TRANSFUSION)

GLANTS, R.M.

USSR/Human and Animal Physiology Blood.

Abstr Jour: Izv Zhur-Biol., No 3, 1958, 36336.

Author : Glants, R.M., Weinstein, S.A., Lekarav, S.A.

Inst :

Title : Fibrinogen Determination in Blood Taken From the Finger.

Orig Pub: V.36. Vopr. pereliivaniya krovi, T.4. Kiev, Gosmeditsit USSR, 1955, 270-273.

Abstract: 0.6 ml of blood is taken from a finger and placed in a centrifuge tube containing 0.06 ml of 0.1 M solution of sodium oxalate and is centrifuged for a period of 10 min. 0.1 ml of thromboplastin sol., 0.1 ml of 0.25-0.1M sol. of  $\text{CaCl}_2$  and 0.1 ml of plasma is placed in a Vidal tube, maintained in a water bath at 37°C. The time of the appearance of the clot is noted. The value

Card : 1/2

21



UCSR/Human and Animal Physiology. Blood.

T

Abs Jour: Ref Zhur-Biel., No 8, 1958, 36336.

of prothrombin is expressed in seconds (prothrombin time). The thromboplastin material used is either a preparation of rabbit brain (method of Eutryshov or Fernal vaccine). Prothrombin time as determined in 115 donors and 41 patients from finger blood was on the average 2.5-3.3 sec. lower than in determinations from venous blood.

Card : 2/2

EXCERPTA MEDICA Sec.3 Vol.12/6 Endocrinology April 58

851. THE EXPERIMENTAL BASIS FOR HAEMOTHERAPY AS A PATHOGENETIC METHOD OF TREATMENT OF ENDOCRINE DISEASES (Russian text) - Glants R. M., Ukrainian Inst. of Blood Transf. and Emergency Surg., Kharkov - PROBL. GEMATOL. I PEREL. KROVI 1956, 1/3 (42-45)  
The transfusion of blood is regularly accompanied by a change in the functional state of the hypophysis, thyroid gland, and cortical and medullary parts of the adrenals. Haemotherapy may be considered as one of the elements of the pathogenetic treatment of endocrine diseases. In this case it must be carried out not as a single transfusion but repeatedly. The final verdict on the value of blood transfusion, in conjunction with specific hormone therapy, as a method of treatment of endocrine diseases awaits further investigation.  
Krymskii - Moscow (S)

ROZENGAUZ, D.Ye., dots., GLANTS, R.M., starshiy nauchnyy sotrudnik

Dynamic prothrombin test in certain diseases of the ear, nose, and throat  
Vest.oto.-rin. 20 no.4:103 J1-Ag '58 (MIRA 11:7)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. A.M. Natanson)  
Khar'kovskogo meditsinskogo instituta i eksperimental'nogo otdela  
(rukovoditel' - starshiy nauchnyy sotrudnik R.M. Glants) Ukrainskogo  
nauchno-issledovatel'skogo instituta perelivaniya krovi i neotlozhnoy  
khirurgii.  
(PROTHROMBIN)

GLANTS, R.M.

Effect of isohemotransfusion and of Belenki's serum on adrenalinlike substances in the heart in rabbits. Biul. eksp. biol. i med. 46 no.12: 45-48 D '58.  
(MIRA 12:1)

1. Iz eksperimental'nogo otdela (rukovoditel' - starshiy nauchnyy sotrudnik R. M. Glants) Ukrainskogo nauchno-issledovatel'skogo instituta perelivaniya krovi ( dir. - starshiy nauchnyy sotrudnik Yu. M. Orlenko) Khar'kov. Predstavlena devyatitel'nykh chlanom AMN SSSR V. N. Chernigovskim.

(MYOCARDIUM, metab.

arterenol, eff. of Belenki serum & isohemotransfusion in rabbits (Rus))

(ARTERNOL, metab.

heart, eff. of iso-transfusion & Belenki serum in rabbits (Rus))

(BLOOD TRANSFUSION, exper.

eff. of iso-hemotransfusion on heart arterenol in rabbits (Rus))

(PLASMA SUBSTITUTES, effects,

Belenki serum on heart arterenol in rabbits (Rus))

GIANTS, R.M.

Some indications of the automatic effect of homologous blood transfusion on functional conditions of the nervous system. Biul. eksp. biol. i med. 47 no.4:46-49 Ap '59.  
(MIRA 12:7)

1. Iz eksperimental'nogo otdela (rukovoditel' - kand. med. nauk, starshiy nauchnyy sotrudnik R.M. Giants) Ukrainского nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. - starshiy nauchnyy sotrudnik Yu. M. Orlenko) Khar'kov. Predstavlena deystvitel'nyy chlenom AMN SSSR V. N. Chernigovskim.

(BLOOD TRANSFUSION, effects  
on sympathetic NS (rus))

(SYMPATHETIC NERVOUS SYSTEM, physiol.  
eff. of blood transfusion (Rus))

GLANTS, R. M., Doc Med Sci -- (diss) "Nerve and endocrine regulation factors in the mechanism of action of various types of hemotherapy. (Experimental clinical research)." Khar'kov, 1960. 29 pp; (Khar'kov State Medical Inst); 250 copies; price not given; bibliography at end of text (31 entries); (KL, 50-b0, 139)

GLANTS, R.M. (Khar'kov)

Some data on the role of the adrenal cortex in the pathogenesis  
of pathological transfusion reactions. Pat. fiziol. i eksp. terap.  
4 no. 5:13-16 S-O '60. (MIRA 13:12)

1. Iz fiziologicheskoy laboratorii Ukrainskogo nauchno-issledovatel'-  
skogo instituta perelivaniya krovi.  
(ADRENAL CORTEX) (BLOOD TRANSFUSION)

GLANTS, R.M.

Effect of the transfusion of polyglucin on the noradrenalin content  
of the rabbit heart. Probl. gemat. i perel. krovi 5 no.2:35-38 F  
'60. (MIRA 14:5)

1. Iz fiziologicheskoy laboratorii (rukovoditel' R.M.Glants)  
Ukrainskogo nauchno-issledovatel'skogo instituta perelivaniya  
krovi i neotlozhnoy khirurgii (dir. - dotsent Yu.M.Orlenko).  
(DEXTRAN) (HEART) (ADRENALINE)



GLANTS, R.M., starshiy nauchnyy sotrudnik; DUBROVIN, V.L., mladshiy  
nauchnyy sotrudnik

Influence of isohemotransfusion on the posterior lobe of the hypophysis.  
Vrach. delo no.10:63-65 O '60. (MIRA 13:11)

1. Eksperimental'nyy otdel (rukovoditel' - starshiy nauchnyy  
sotrudnik R.M.Glants) Ukrainskogo nauchno-issledovatel'skogo instituta  
perelivaniya krovi i neotlozhnoy khirurgii.

(BLOOD--TRANSFUSION)

(PITUITARY BODY)

GLANTS, R.M.

Effect of isohemotransfusion on the metabolism of adrenergic substances in the brain and effector organs. *Biul. eksp. biol. i med.* 49 no.2: 77-80 F '60. (MIRA 14:5)

1. Iz fiziologicheskoy laboratorii (rukovoditel' -- kandidat meditsinskikh nauk R.M.Glants) Ukrainskogo nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. -- starshiy nauchnyy sotrudnik Yu.M.Orlenko). Predstavlena deystvitel'nyy chlenom AMN SSSR V.N. Chernigovskim.

(BLOOD--TRANSFUSION)

(SYMPATHOMIMETICS)

GLANTS, R.M., kand.med.nauk; DUBROVIN, V.L., mladshiy nauchnyy sotrudnik  
(Khar'kov)

Influence of isohemotransfusion on the function of the internal  
secretory area of the pancreas. Probl.endok.i gorm. 7 no.4:  
96-101 '61. (MIRA 14:8)

1. Iz fiziologicheskoy laboratorii (rukovoditel' - kand.med.nauk  
R.M. Glants) Ukrainskogo nauchno-issledovatel'skogo instituta  
perelivaniya krovi i neotlozhnoy khirurgii (dir. - kand.med.  
nauk Yu.M. Orlenko).  
(PANCREAS) (BLOOD--TRANSFUSION)

GLANTS, R.M.

Nervous and endocrine factors of regulation in the mechanism of stimulating action of various types of hemotherapy. Probl. gemat.i perel.krovi no.5:33-40 '61. (MIRA 14:6)

1. Iz fiziologicheskoy laboratorii (zav. - R.M. Glants) Ukrain-skogo nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. L.A. Ripyakh).  
(BLOOD--TRANSFUSION) (ENDOCRINE GLANDS) (NERVOUS SYSTEM)

DUBROVIN, V.L.; GLANTS, R.M. (Khar'kov)

Effect of transfusion of heterogenic blood on the function of  
the endocrine portion of the pancreas. Pat. fiziol. i eksp.  
terap. 6 no.1:86-87 Ja-F '62. (MIRA 15:3)

1. Iz fiziologicheskoy laboratorii (rukovoditel' - dektor  
meditsinskikh nauk R.M. Glants) Ukrainского instituta perelivaniya  
krovi i neotlozhnoy khirurgii (dir. - kand.med.nauk L.A.  
Ripyakh).

(PANCREAS—SECRETION) (BLOOD—TRANSFUSION)

LESHCHENKO, G.D., prof.; GLANTS, R.M., prof.; GOICHAROV, V.D. (Khar'kov)

Interrelations between the thyroid gland and the adrenal cortex in patients with lesions in the central nervous system; on the problem of neurosomatic unity. Vrach. delo no.7:3-9 JI'63.

(MIRA 16:10)

1. Kafedra nervnykh bolezney (zav. - prof. G.D.Leshcherko) Khar'kovskogo meditsinskogo instituta i fiziologicheskaya laboratoriya (rukovoditel' - prof. R.M.Glants) Ukrainского nauchno-issledovatel'skogo instituta perelivaniya krovi i neotlozhnoy terapii.

(ADRENAL CORTEX) (THYROID GLAND)  
(DIENTEPHALON—DISEASES)

GLANTS, R.M., prof.; PANCHENKO, N.I.; PASTERNAK, M.G.

Effect of isohemotransfusion on the content of sulfhydryl groups  
in some animal organs and tissues. Probl. gemat. i perel. krovi  
8 no.11:41-44 N '63. (MIRA 17:12)

1. Iz fiziologicheskoy laboratorii (zav. prof. R.M. Glants) i  
biofiziko-khimicheskoy laboratorii (zav. N.I. Panchenko)  
Ukrainskogo instituta perelivaniya krovi i neotlozhnoy khirurgii  
(direktor L.A. Ripyakh).

GLANTS, P.M.; KLIMKOV, N.A.; PETRENKO, V.M.

Changes in the quantity of reticulocytes in the peripheral blood under the effect of a brief hypoxia as a method for evaluating the functional state of bone marrow. Gemat. i perel. krov' 1:175-179 '65. (MIRA 18:10)

1 Khar'kovskiy institut perelivaniya krov'.



GIANTS, P.M.

Effect of isohemotransfusion on the functional state of the  
adrenal cortex in surgical patients. Lat. Period. 1 exp.  
terap. 1 no. 5:79-80 S-G 105. (MFA 1:1)

1. Fiziologicheskaya laboratoriya (ukroved'tel' - prof. R.M.  
Giants) "Kraiskogo naučno-issledovatel'skogo instituta pere-  
livaniya krovi i neotlozhnoy khirurgii, Kiev". Submitted  
April 22, 1964.

GLANTS, Yu.A., inzh.; FINGER, L.M., inzh.; NIKOGOSOV, S.M., kand. tekhn. nauk (Leningrad); MEDVEDSKIY, N.I., inzh. (Leningrad); VOLOTSKOY, N.V., kand. tekhn. nauk; BESSMERTNYI, I.S., kand. tekhn. nauk (Moskva); VORONTSOV, F.F., kand. tekhn. nauk (Moskva).

Urgent problems relative to the theory of urban power networks.  
Elektrichestvo no.12:73-78 D '56. (MIRA 11:3)

1. Khar'kovskoye otdeleniy Teploelektroproyekta (for Glants).
  2. Gi-prokommunenergo (for Finger).
  3. Lengiprogor (for Medvodskiy).
  4. Lanproyekt (for Volotskoy).
- (Electric networks) (Electric power distribution)

AUTHOR SLANTS Yu.A., Eng. 105-7-10/29  
 TITLE Using Load Distribution Diagrams for Calculating Urban Networks.  
 (Primeneniye grafikov raspredeleniya nagruzki dlya rascheta gorodskikh setey.- Russian)  
 PERIODICAL Elektrichestvo 1957, Nr 7. pp 45-50 (U.S.S.R.)  
 ABSTRACT The method given here for the construction of load distribution diagrams facilitates technical-economic calculations. The idea as such originates from V.P. KHASHCHINSKIY (1926, "Canalization of Electric Energies", KUBUCH, Leningrad). At first a radial line is investigated, in which the loads are distributed lengthwise. The step like diagram is replaced by an equivalent one: once by a rectangle having the length of the line as a basis, the other side with the entire load as height. The relative value of the equivalent load and the equivalent distance are equal to one another.  
 In 1932 KHRUSHECHEV introduced the coefficient  $\alpha$   

$$L_{\text{equi}}^* = L_{\text{equi}} \cdot \alpha$$
 which can be changed from 0 to 1.  
 In an analogous manner the distribution of the rectangle

CARD 1/2

Using Load Distribution Diagrams for Calculating Urban Networks. 104-7-10/29

of loads can be dealt with, but in this case coefficient  $\beta$  is introduced. Next, the application of this method to a load along a ring line is shown. For this purpose two diagrams are coupled. Feeding of the line takes place first in one and then in an inverse direction. For those cases in which a double line is used, calculation is more complicated. (With 4 Illustrations, 1 Table and 2 Sheet. References)

ASSOCIATION: Branch of Teploelektroproekt at Khar'kov.  
PRESENTED BY: -  
SUBMITTED: 12.10.1956  
AVAILABLE: Library of Congress.

CARD 2/2

11. *Chrysomelids*, *Chrysomelidae*, (200-250)

The result is an  $n$ -term sequence of the form  $\{a_1, a_2, \dots, a_n\}$  which is periodic, aperiodic, and  $n$ -periodic.  $\square$

1954-55

GLANZ. A.

The present and the future of industrial television. p. 407.

SDELOVACI TECHNIKA. (Ministerstvo strojirenstvi) Praha, Czechoslovakia,  
Vol 7. no. 11, Nov. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1,  
Jan. 1960.

Uncl.

S/031/62/000/017/022/102  
B166/B180

AUTHORS: Nachman, M., Glanz, G., Ribco, L.

TITLE: Oxidation of silver induced by nuclear radiation

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 66, abstract  
179451 (Rev. phys. Acad. RPR, 1961, v. 6, no. 3, 1961, 403-409  
[Eng.] )

TEXT: The process studied was the oxidation of Ag foil and wire by gaseous  $O_2$  under radiation from a reactor. The weight increase of the specimens was measured and photomicrographs of the surface were studied. It was found that, at  $50^\circ C$ , when only a monomolecular layer of oxide forms on the surface in the absence of irradiation, Ag oxidation does take place with radiation, and moreover, the oxidation rate apparently increases with the dose. The oxidation is induced by the action of  $\gamma$ -pile radiation which gives rise to the formation of negative ions  $O^-$  and  $O_2^-$  in the  $O_2$ , which oxidize the Ag. [Abstracter's note: Complete translation.]

Card 1/1

**"APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000500010010-4**

**APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000500010010-4"**



**"APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000500010010-4**

**APPROVED FOR RELEASE: 09/24/2001**

**CIA-RDP86-00513R000500010010-4"**

... ..  
... ..  
... ..  
... ..  
... ..

P/044/60/003/004/006/012

AUTHOR: Glapski, M., Major, Master of Engineering

TITLE: Testing Methods in Aerodynamic Research

PERIODICAL: Wojskowy Przegląd Lotniczy, 1960, Vol 8 No 4 pp 52 52

TEXT: Aerodynamic test methods are described. After a general introduction, a rotation tester of 3.5 m radius and circumferential speed of 100 m/sec (Diagram 1) used at the CAGI, Central Aerodynamic Research Institute in the USSR, is described. Description of wind tunnels for subsonic and supersonic speeds is given and their functions graphically shown (Diagrams 2 and 3). Aerodynamic balances are described the principle of a triple balance shown (Diagram 4) and the calculation method given. The "Three Moments Method" is explained and shown (Diagram 5). Definition of balance precision, sensitivity and stability is given. Strain gauges working on the principles of electric capacity (Diagram 6), electric induction (Diagram 7) and electric resistance (Diagram 8) are described and ways of their arrangement at tests in wind tunnels explained (Diagrams 9, 10 and 11). There are 11 diagrams.

✓

Card 1/1

F/044/61/000/006/002/004  
D001/D101

AUTHOR: Glapski, M., Major, Master of Engineering

TITLE: Boundary layer control

PERIODICAL: Wojskowy przegląd lotniczy, no. 6, 1961, 25-34

TEXT: The instructive article is a general account of the theory of boundary layers and the means of boundary layer control. Formation of the boundary layer is explained and the means of control listed, which are: slots, fences, vortex generators, slotted and double-slotted flaps, suction slots and blowing slots. There are 12 figures and 3 Soviet-bloc references: 2 Soviet and 1 Polish. ✓

Card 1/1

IGLITSYN, M. I.; VORONKOVA, G. I.; VORONKOV, V. V.; GLARIOSOVA, R. I.; SOLOVYEVA, E. V.;  
SUSHKOV, V. P.; UKHROVA, E. S.

"The investigation of the recombination processes in single crystals of  
Si, Ge."

report submitted for Intl Conf on Physics of Semiconductors, Paris, 19-24  
Jul 64.

State Sci Res Inst of Rare metals, Moscow

GLARTOZOV, G. I. Unreliable

Author of article, "Mikhail Dolan's legacy," a review of the author's  
operation, published in "Soviet Union" (Moscow) in 1957.  
of a handwritten note and accompanied the article. "Pravda Zvezda",  
Moscow, 21 Sep 57

SO: GUM 201, 2 Dec 1957

GLARIOZOV, Ye.L., inzh.

Designing a transistor amplified for reading the storage on a  
magnetic drum. Priborostroenie no.4:4-6 Ap '65.

(MIRA 18:5)





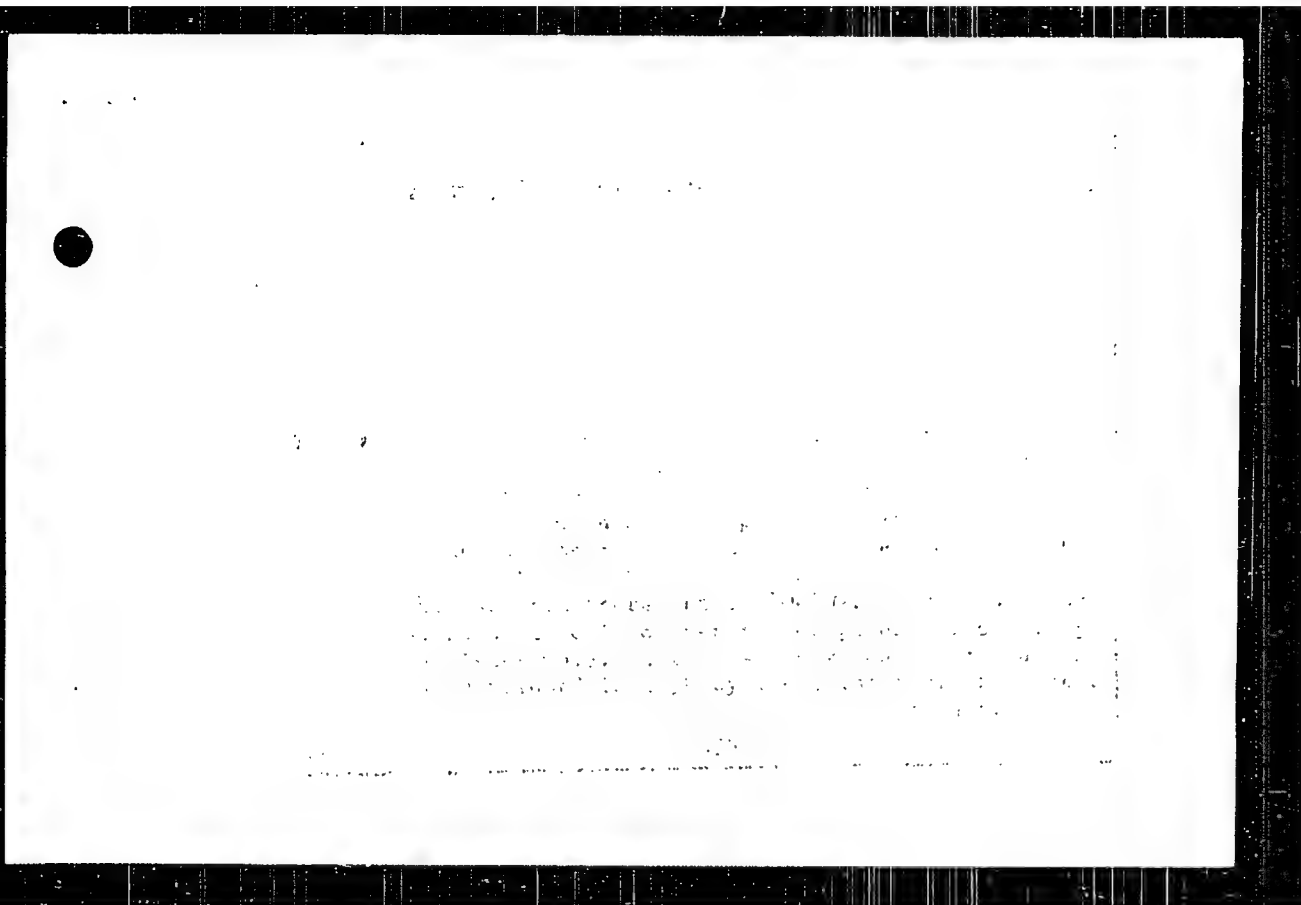
Card 1/3

L 61662-65

ACCESSION NR: AP5011139

The ruby temperature could be varied from -10 to -1500 using liquid air. In this case the wave length of the laser emission varied from 604.0 to 603.1 nm. The light beam from the laser was





44098-55

ACC NR: AP6022173 (N, A) SOURCE CODE: PO/0087/66/000/003/0110/0110

AUTHOR: Glasenapp, Romuald (Engr.)

ORG: none

TITLE: Unmanned "Kikut" lighthouse

SOURCE: Technika i gospodarka morska, no. 3, 1966, 110

TOPIC TAGS: ~~unmanned lighthouse, standby lighthouse, radiant~~, navigation light,  
~~navigation light equipment, ship navigation~~

ABSTRACT: Approaching Swinoujscie from the sea by the eastern waterway is difficult because of navigational obstacles and the narrowness of the channel. Therefore, it was decided in 1959 to transform the old "Kikut" tower from a mere bearing point into an unmanned lighthouse with a range of 20 nautical miles at 0.85 visibility and a light sector of 182 degrees. The lighthouse was put into operation in February 1962. It has two radiants: an electric as the main and an acetylene-gas as the standby light source. The light is turned on and off by a

Card 1/2

L 44098-66

ACC NR: AP6022173

clock mechanism. The acetylene-gas light is substituted automatically in case the electric bulb burns out, and it is of equal power. Equipment is inspected monthly, but acetylene-gas reserves are sufficient for two months' continuous operation. The lantern is air-heated in fall and winter. The heat is switched on automatically half an hour before the light goes on. [DR]

SUB CODE: 17/ SUBM DATE: none/

Card 2/2 LC

BLASSER, D. A.

24

PHASE I BOOK EXPLORATION

801/5982

International Conference on High-Energy Physics. 9th, Kiev, 1959.

Dovydova moshumarnaya konferentsiya po fizike vysokikh energii, Kiev 15-25 iyulya 1959 g. (Ninth International Conference on High-Energy Physics. Kiev, July 15-25, 1959), Moscow, 1961. 739 p. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Mezhdunarodnyy Soyuz chistoy i prikladnoy fiziki.

Contributors not mentioned.

PURPOSE: This book is intended for nuclear physicists.

COVERAGE: The collection contains 30 scientific articles presented at the 9th International Conference on High-Energy Physics, held in Kiev from 15 to 25 July 1959. The articles presented relate mainly to the progress in nuclear physics achieved in 1959. Subjects discussed are the production of

Card 1/0 3

Fifth International Conference (Cont.)

SGR/5982

nucleons, their structure, weak and strong interactions, scattering, and their decay. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

Opening of the Conference	3
Fermi, G. Photoproduction of $\pi$ -Mesons and Compton Effect on Nucleons	11
Discussion	54
Percheron, D. Scattering of Pions by Nucleons and Single Production of Pions in Nucleon-Nucleon and Pion-Nucleon Interactions	63
Discussion	116
Segre, E. Antinucleons and Their Interactions	133
Discussion	152
Card 2/0 3	

Ninth International Conference (Cont.)

SCV/5982

Discussion

546

Whiteman, A. S. Inhomogeneous Wave Equation in Local  
Relativistic Quantum Field Theory

547

Discussion

550

Résumé of Reports Presented for the "New Theoretical  
Ideas" Session

551

Discussion

600

Glaser, D. A. Decay of Strange Particles

607

Discussion

625

Marshall, R. I. Modern State of the Weak Interactions Theory

627

Card 7/8



GLADST, G.

Increasing the productivity of metalcutting machines. p. 19.

TEKHNA PROMISHLEENOST. (Ministerstvo na tezhkata promishlenost, Sofia, Bulgaria.  
Vol. 8, no. 6, June 1959.

Monthly List of East European Accessions RDAI, IC, Vol. 9, No. 2, Feb. 1960.  
UNCL

GLASER, Josip dr. (Zagreb-Vrapce)

Problem of hospitalization of mentally sick with tuberculosis.  
Tuberkuloza, Beogr. 7 no.5-6:372 Sept-Dec55

1. Prim. dr.

(MENTAL DISORDERS, compl.  
tuberc., pulm., problem of hospitalisation in Yugosl.  
(Ser))

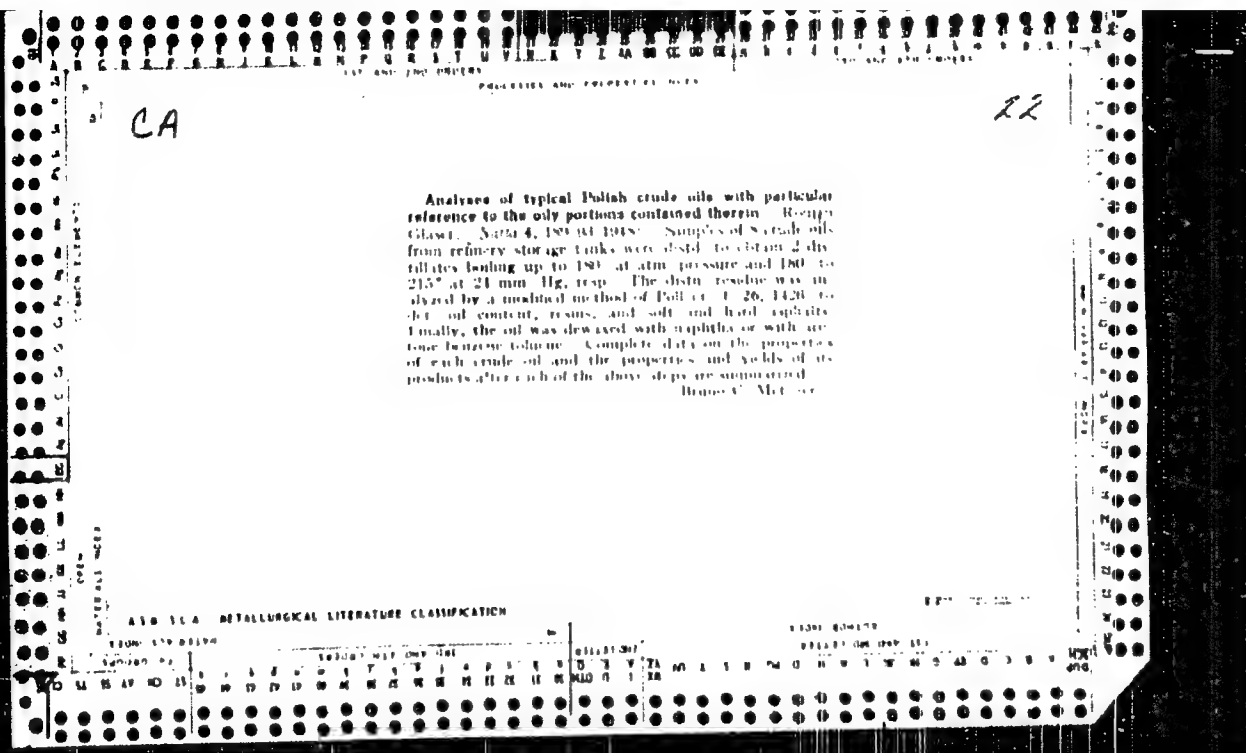
(TUBERCULOSIS, PULMONARY, compl.  
ment. disord., problem of hospitalisation in Yugosl.  
(Ser))

GLASER, J.

Problem of schizophrenia in the light of nosology.  
Neuropsihijatrija 4 no.3-4:226-241 1956.

1. Iz Bolnice za zivcane i dusevne bolesti Vrapce-Zagreb  
(Ravnatelj: Prim. Dr. J. Glaser).

(SCHIZOPHRENIA,  
nosology (Ser))



Removing corrosive sulfur compounds from gasolines  
 Roman Glaser and Janina Kurovska. *Natura* 3, 372 (1940).--Treatment with NaOH soln. and then with hypochlorite soln. did not completely remove elemental S from gasoline contg. 0.12% total S,  $H_2S$  0.005%, mercaptans 0.034, elementary S 0.005, disulfides 0.025, sulfides 0.029, thiophenes, etc., 0.025%. With hypochlorite used in slight excess, the gasoline gave a pos. Cu strip test, while with a slightly reduced amt. of hypochlorite it passed the Cu strip test but not the doctor test. A similar sample was completely sweetened by washing with  $H_2O$  to remove  $H_2S$ , then countercurrently extd. in a tower with aq. NaOH soln. and  $CH_3OH$  in the ratio between 1:2 and 1:5. The treated gasoline contained 0.0055% mercaptans one day after treatment, but only traces after a month's storage. The spent aq. mixt. of NaOH and  $CH_3OH$  can be regenerated in 3 stages. Bruno C. Mettner.

1454

685 52 002 6 546 22 68 05

Glaser R., Zielinski H. Sulphur Compounds in Crude Oil and its Products.

„Związki siarkowe w ropie naftowej i jej produktach” (Prace Gł. Inst. Naft. i. Katowice, 1951, PWT, 20 pp., 24 figs)

Sulphur compounds, present in petroleum distillates, are undesirable owing to their corrosive action which lowers the octane number of motor fuels etc. Experiments into the removal of mercaptans from light distillates by means of continuous method in counter-flow using aqueous sodium hydroxide and methanol, are described. It is stated that there is a certain optimal flow rate of gasolene at which the best extraction results are obtained. This rate depends mostly on the height and diameter of the column and on the size of packing rings.

GLASER, R

11(4)

PHASE I BOOK EXPLOITATION

POL/2407

Wojnar, J., Professor, Engineer; Wł. Chajec, Master in Science;  
Br. Fleszar, Master in Engineering; R. Glaser, Master in  
Engineering; J. J. Głogoczowski, Doctor, Docent; H. Górka,  
Engineer, Docent; B. Manasterski, Doctor, Engineer; F.  
Mitura, Docent, Master in Science; St. Niementowski, Docent,  
Engineer; J. Ostaszewski, Docent, Engineer; St. Suknarowski,  
Doctor, Professor; L. Tomaszekiewicz, Engineer; and A.  
Waliduda, Docent, Engineer

Dwaście lat pracy Instytutu Naftowego, 1945 - 1956 (Twelve  
Years Work of the Petroleum Institute, 1945 - 1956) Katowice,  
WG-H, 1957. 130 p. Errata slip inserted. 1,555 copies printed.

Tech. Ed.: S. Misztó.

PURPOSE: This book is intended to introduce readers to the de-  
velopment and activities of the (Polish) Petroleum Institute  
from 1945 to 1956.

COVERAGE: The book describes the organizational structure and ac-  
tivities of the Petroleum Institute since its foundation in  
Card 1/3

Twelve Years Work (Cont.)

POL/2407

Krosno in 1945. It includes photos of buildings, laboratories, equipment, and personnel of the Institute, and gives the names of the scientists. A bibliography of publications of the Institute is included. The Institute cooperates with scientific institutes of 16 foreign countries.

TABLE OF CONTENTS:

Introduction	5
Organization of the Institute	6
General Characteristics of the Work of the Institute	14
Scientific Personnel of the Institute	18
Listing of Scientific Research Studies	20
Cooperation With Foreign Countries	85
Books and Publications	83
Card 2/3	



Twelve Years Work (Cont.)

POL/2407

. Documentation and Libraries

111

. Opinions on the Studies of the Petroleum Institute

124

. AVAILABLE: Library of Congress

TM/jb  
10-21-59

Card 3/3

GLASER, Tadeusz

The problem of virus diseases in orchards. Postępy nauk roln 8 no.6:  
81-90 '61.

(Fruit culture)

ZALUSKI, Karol; GLASER, Tadeusz; GLEBOZINSKI, Edward.

Influence of environment factors on the development and health of chestnut trees. Prace nauk roln i lesn 17 no.1:47-65 '64.

1. Department of Phytopathology, College of Agriculture, Poznan.

GLASER, VLADIMIR

Kovarijantna kvantna elektrodinamika. Zagreb, Jugoslavenska akademija  
znanosti i umjetnosti, 1955. 175 p. /Covariant quantum electrodynamics.  
bibl.7

SOURCE: East European Accessions List (EEAL), Library of Congress,  
Vol. 5, No. 12, December 1956.

YUGOSLAVIA/Electricity - Conductors

G-4

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 27902

Author : Glaser V., Jaksic B.

Inst : Faculty of Sciences, Zagreb, Yugoslavia

Title : On the Methods of Solution of the Bloch Integral Equations  
at Low Temperatures.

Orig Pub : Glasnik mat.-fiz., i astron., 1957, 12, No 4, 257-267

Abstract : The Bloch integral equation can be obtained from certain variational principles (Kohler M.Z. Physik 1948, 124, 772; 1949, 125, 679). If one expands at low temperatures the varied expression in a series in powers of the temperature and one retains only the first term, then the Euler equation of the variational problem gives a certain differential equation, which replaces the Bloch equation. All the quantities entering into this equation are taken on the Fermi surface. The formula of this equation is obtained for these Fermi surfaces, on which the ratio of the speed of the electron to the speed of sound is greater than unity. If this deviation

Card : 1/2

CZECHOSLOVAKIA

GLASER, V; ROUSAR, I

Department of Inorganic Chemistry, Institute of  
Chemical Technology, Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communi-  
cations, No 5, May 1966, pp 2137-2143

"Calculation of the rate of a half-order reaction  
proceeding in pores of a catalyst."

CHOLAKOV, Iv., inzh.; GLASERMAN, IA.

Some urgent problems in the field of the economic efficiency of capital investments in mining, ore dressing, and nonferrous metallurgy. Min delo 17 no.4:17-21 Ap '62.

1. Gl. inzhener pri Upravlenie "Tsvetna metalurgii i rudodobiv" i chlen na Redaktsionnata kolegiia, "Minno delo i metalurgii" (for Cholakov). 2. N-k na planoviiia otel pri Upravlenie "Tsvetna metalurgii i rudodobiv" (for Glaserman).

GLASHCHINSKAYA-BABENKO, L. V.

1A 07/1/1963

USSR/Medicine - Ticks  
Medicine - Taxonomy

Mar 49

"Chaetotaxy of the Body of the Larvae of the Tick  
Ixodidae and Its Taxonomic Importance," L. V.  
Glashchinskaya-Babenko, Inst of Malaria, Med.  
Parasitol and Helminthol, Min of Health USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 2

States preliminary conclusions of chaetological  
study of the larvae of 14 forms of ticks belonging  
to six species of the Ixodidae family. Submitted  
by Acad K. I. Skryabin, 20 Jan 49.

39/49163



СЛАВЯНИНСКАЯ БАШНЯ, 5.5.

USSR/Zooparasitology - Tics and Insects (Bioscience Transmitters) P-3

Abs Jour : Referat Zhur - Biologii, No 16, 1957, 76114

Author : Gauskhinskaya-Papenkova, L.Y.  
Title : *Ixodes lividus* Koch, As a representative of parrowing  
Tics-Ixodidae.

Orig Pub : Materialy k poznaniyu fauny i flory SSSR, Otdel. zoolog.  
1956, vyp. 34(49), 21-105

Abstract : First, there is a detailed morphology of larvae, nymphs,  
male and female tics. *I. lividus* parasite of a river-bank  
swallow. A comparative analysis of ontogenetic signs is  
given, and the degree of the individual change is given.  
On the basis of biological observations in nature, con-  
ducted in Moscow, Ryazan and Kaluzh regions, and on labo-  
ratory experiments, the life scheme of the species is  
deciphered. The species lives under cover, in the nest  
of the bank swallow; it is uncommon for it to leave the  
nest. *I. lividus* is monophagous. In the laboratory,

Card 1/3

- 22 -

USSR/Zooparasitology - Tics and Insects (Bioscience Transmitters) P-3

KUDRYAVTSEV, P. I., kand. filosofskikh nauk; GLASHKIN, Yu. I., starshiy  
prepodavatel'

Creative contribution of the 21st Congress of the CPSU to the  
development of Marxist-Lenin's theory. [Trudy] GIDUV no.23:5-28  
'60. (MIRA 15:7)

(COMMUNISM)

TARIVERDIYEV, A.D., inzhener; GLASHKINA, R.P., inzhener.

The engineering requirements must be revised. Avt.dor.17 no.2:30  
S-O '54. (MIRA 8:4)  
(Road materials)

NAZIROV, M.R.; GLASHKINA, T.P.; TUAYEV, S.M.

Treatment of taeniarhynchosis with atabrin. Med. paraz. i paraz. bol.  
no.4:305-306 O-D '54. (MIRA 8:2)

1. Iz kafedry malyarii i meditsinskoy parazitologii Instituta  
usovershenstvovaniya vrachey i Instituta malyarii i meditsinskoy  
parazitologii Ministerstva zdravookhraneniya Azerbaydzhanskoy SSR.

(QUINACRINE, therapeutic use,  
tapeworm infect.)

(TAPEWORM INFECTION, therapy,  
quinacrine)

NAZIROV, M.R.; professor; GLASHKINA, T.P.; TUAYEV, S.M.

Acrichine and oxygen therapy in treatment of patients with helminth infections. Sov.med. no.3:70-71 Mr '55. (MLRA 8:5)

1. Iz kafedry malyarii i meditsinskoy parazitologii Instituta usovershenstvovaniya vrachey i Instituta malyarii i meditsinskoy parazitologii (dir. -prof. M.R.Nazirov) Ministerstva zdravookhraneniya Azerbaydzhanskoy SSR.

(HELMINTH INFECTIONS, ther.,  
oxygen & quinacrine)

(OXYGEN, ther. use,  
helminth infect., with quinacrine)

(QUINACRINE, ther. use,  
helminth infect., with oxygen)

NAZIROV, M.R.; GLASHEINA, T.P.

Effectiveness of the newest anthelmintic drugs. Azerb. med. zhur.  
no. 1:3-9 Ja '61. (MIRA 14:2)

(ANTHELMINTICS)

GLASHKINA, T.P.

Metabolism in ankylostomiasis. Report No.2: Carbohydrate  
metabolism. Azerb. med. zhur. no.9:40-44 S '61. (MIRA 14:9)

1. Iz kafedry malyarii i medparazitologii (zaveduyushchiy -  
zasluzhennyy deyatel' nauki, prof. M.M.Hazirov) Azerbaydzhanskogo  
instituta usovershenstvovaniya vrachey (direktor - prof. A.M.Aliyev):  
(CARBOHYDRATE METABOLISM) (HOOKWORM DISEASE)

NAZIROV, M.K., zasluzhennyy deyatel' nauki, prof., GIASHEVA, T.P.,  
kand. med. nauk

Current concepts of helminthiasis and its prevention, Azerb.  
med. zhur, 41 no. 3:77-82, Apr '64. (MIRA 17:20)

1. Iz klyuchnykh meditsinskoy parazitologii i tropicheskoy  
meditsiny (zav. - prof. M.K. Nazirov) Azerbaydzhanskogo  
instituta usovrasheniya vrachey imeni A. Alkayeva  
(rektor - kand. med. nauk D.M. Agayev).



A. (PCV, F11) 11. 1.1.

and aspects of development at the present stage. Azerb.  
Sov. zhur. 41 no.5:16-23 Aug '64. (MIRA 18:10)

GLASIONOV, YA. M.

25927 Glasionov, Ya. M. K voprosu patogeneza i lecheniya likvornykh  
svishey na pochve ognestrel'nykh cherepnomozygovykh raneniy. V.  
sb: problemy vosstanvit. lecheniya invalidov Otechestv. voyny.  
Astrakhan', 1948, s. 44-51

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948



GLASIONOV, YA. M.

33544

Professor Vasiliiy Mikhavlovich Bal'. (Khirurg. D 60-Letiyu So Inya Rozhdeniya).  
Khirurgiya, 1949, No 10 c. 74-75, S Portr

SO: Letopis' Zhurnal'nykh Statey, Vol 45, Maskva, 1949

GLASIONOV, Ya.M.

Intrahepatic localization of the gall bladder. Khirurgiia no.12:  
116-117 '61. (MIRA 15:11)

1. Iz khirurgicheskogo otdeleniya (zav. Ya.M. Glasionov) Novokuybyshevskoy gorodskoy bol'nitsy Kuybyshevskoy oblasti (glavnyy vrach I.V. Shaviro).

(GALL BLADDER--ABNORMALITIES AND DEFORMITIES)  
(LIVER)

GLASIONOVA, T.M., ROMANOVA, A.M.

Investigating the doffing process on carding machine. Izv.vys.  
ucheb.zav.; tekhn.tekst.prom. no.3:57-65 '60. (MIRA 13:7)

1. Leningradskiy tekstil'nyy institut im. S.M. Kirova.  
(Carding machines)

GLASIONOVA, T.M.; TRUYEVTSSEV, N.I.

Forces acting upon yarn fibers during breakage. Izv. vys.  
ucheb. zav.; tekhn. tekst. prom. no.4:17-21 '63.  
(MIRA 16:11)

1. Leningradskiy tekstil'nyy institut imeni S.M. Kirova.

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010010-4

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000500010010-4"



GIASKO, A.S.

Using the simplest planimeter in measuring planes of  
fusibility diagrams of silicate systems. Silikaty no.2:  
99-105 '59. (MIRA 13:6)

(Planimeter)

GLASKO, A.S., starshiy prepodavatel'

Hatchet planimeter developed by Pritz. Trudy MIMESKH 8:85-99 '59.  
(MIRA 13:9)

(Planimeter)

GLASKO, A.S., starshiy prepodavatel'.

Simple device for measuring the area of graphs in dynamometric testing of agricultural machinery. Its design, theory, and use.

Trudy MIMESKH 9:74-113 '59.

(MIRA 13:11)

(Agricultural machinery--Testing)

(Dynamometer)

7

GLASKO, A. S.

Cand Tech Sci - (diss) "Analysis of a most simple instrument for measuring the areas of diagrams of dynamometrization of agricultural machines and the determination of the preciseness of instructions for the instrument as a function of operating factors." Moscow, 1961. 16 pp with diagrams; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; (KL, 6-61sup, 215)

GLASKO, M. M.

AID P - 4853

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 13/26

Author : Glasko, M. M.

Title : Modernization of the drilling machine

Periodical : Stan. i instr., 2, 34-35, F 1956

Abstract : Certain additions to a vertical drilling machine were made at the author's suggestion at the "Kaliber" plant in Moscow. The alterations made it possible to thread a hole after drilling by the same machine, thus replacing manual tap-boring in the absence of a special screw-threading machine in the shop. The alterations and handling of the rebuilt unit are described and illustrated. Three drawings.

Institution : As above

Submitted : No date

GLASKO, N.M.; KOPYTIN, B.M.

Portable microelectrolyser for quantitative polarographic analysis.  
Biokhimiia, Moskva 15 no.1:94-96 Ja-F '50. (CMLL 19:3)

1. Department of Pathological Physiology, Central Institute for the  
Advanced Training of Physicians, Moscow.

RYABOV, V.N.; GLASKO, N.M., redaktor; BEL'CHIKOVA, Yu.S., tekhnicheskii redaktor.

[How to construct a village bathhouse] Kak ustroit' sel'skuu baniu. Izd. 3-e, ispr. Moskva, Gos. izd-vo med. lit-ry, 1954.  
19 p. (MLRA 7:11)

(Baths, Public)

STARKOV, Gennadiy Leonidovich; GLASKO, N.M., redaktor; SACHEVA, A.I.,  
tekhnicheskiy redaktor

[How to preserve and improve your sight; talks by an oculist]  
Kak sokhranit' i uluchshit' zrenie; besedy glaznogo vracha.  
Moskva, Gos. izd-vo med.lit-ry, 1955. 44 p. [Microfilm] (MLRA 10:6)  
(SIGHT)



ALEKSANDROV, Il'ya Naumovich, doktor meditsinskikh nauk; GLASKO, N.M.,  
red.; SACHEVA, A.I., tekhn.red.

[Prevention and treatment of hardness of hearing and deafness]  
Preduprezhdenie i lechenie tugoukhosti i glukhoty. Moskva,  
Gos.izd-vo med.lit-ry, 1955. 53 p. (MIRA 12:3)  
(DEAFNESS)

PASYNKOV, Ye.I.; RUBIN, L.R.; GLASKO, H.M., redaktor; GILKHOYEDOVA, G.A.,  
tekhnicheskiy redaktor

[General physical therapy; brief course] Obshchaya fizioterapiya;  
kratkii kurs. Izd. 3-e. Moskva, Gos. izd-vo meditsinskoi lit-ry,  
1955. 253 p. (MIRA 9:2)

(PHYSICAL THERAPY)

ARUTYUNOV, V.Ya., prof.; BERKOVICH, I.M., doktor med.nauk; BUNIN, K.V., prof.  
 VRLIKORETSKIY, A.N., prof.; GAMBURG, R.L., doktor med.nauk; GLASED,  
 H.M.; ZVYAGINTSEVA, S.G., doktor med.nauk; IVENSKAYA, A.M., kand.med.  
 nauk; KALUGINA, A.N., kand.med.nauk; KAMINSKAYA-PAVLOVA, Z.A., prof.  
 KVATER, Ye.I., prof.; KOISH'KO, A.B., prof.; KOSSYURA, M.B., kand.  
 med.nauk; KHAVETS, E.M., doktor med.nauk; KRISTIAN, V.I., kand.med.  
 nauk; KRUIZHKO, V.A., dotsent; LIKHACHEV, A.G., prof.; LUKOMSKIY, I.G.,  
 prof.; MASHKOVSKIY, M.D., prof.; ROZENTAL', A.S., prof.; SEREYSKIY,  
 M.Ya. [deceased], prof.; TURETSKIY, M.Ya., kand.med.nauk; KHESIN,  
 Ye.Ye., dotsent; KMDIUA, Kh.L., kand.med.nauk; SHABANOV, A.N., prof.;  
 red.; BORDAK', Z.A., red.; ZAKHAROVA, A.I., tekhn.red.

[Medical handbook for feldshers] Meditsinskii spravochnik dlia  
 fel'dsherov. Izd. 6-oe, perer. i dop. Moskva, Gos. izd-vo med.  
 lit-ry, 1957. 899 p. (MIRA 10:12)  
 (MEDICINE--HANDBOOKS, MANUALS, ETC.)

CONFIDENTIAL

(S)

FORM NO. 10-69 CODE: 32/0412/66/000/015/0069/0089

Authors: M. M. V. V.; Kozlovskiy, Z. V.; Korobuk, V. V.; Glazko, S. A.

0201 0000

TABLE 1. Method for hardening unsaturated polyester resins. Class II, No. 164442

SOURCE: Izvestiia, from obituary for Zhukov, no. 15, 1966, 80

TOPTIC TAGS: polyester, resin, copolymer, polyester plastic

ABSTRACT: This Invention Certificate presents a method for hardening unsaturated polyester resins by copolymerizing them with cross-linking agents in the presence of an oxidizing-reducing system. To increase the resistance to deformation and the mechanical strength of the hardened polyesters at high temperatures, polyfunctional furane compounds (such as furfurylacrylate) are used as cross-linking agents.

SUB CODE: 0711/ SUBM DATE: 21Apr65

Card 1/1 <sup>4/72</sup>

UDC: 678.674.028.294

1. GLASKO, V.
  2. USSR (600)
  4. Maps
  7. "Talking" map. Tekh molod No 1 1951.
9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ April \_\_\_\_\_ 1953, Uncl.

GLASKO, V., uchitel' (Selo Yasnaya Polyana)

School planetarium. Tekh.mol.22 no.4:38-39 Ap '54. (MLRA 7:4)  
(Planetaria)

GLASKO, V. B.

GLASKO, V. B. --"On the Influence of Degeneracy on the Eigen Values and Eigen Functions of Certain Boundary Problems Containing Small Parameters." Moscow State University A. V. Lomonosov, Physical Faculty, Moscow, 1955 (Dissertation For the Degree of Candidate in Physicomathematical Sciences)

SO: Knizhnaya letopis' no. 37, 10 September 1955

GLASSO 10

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp. Volosov, V. M. (Moscow). On the Asymptotic Behaviour of Solutions of Some Differential Equation of Non-linear Oscillations.

219-220

Mention is made of Krylov, N. M. and Bogolyubov, N. N.

Glasko, V. B. (Moscow). On the Relationship of Eigenvalues and Eigenfunctions of Certain Boundary Problems of Small Parameter.

220

Goryainov, A. S. (Moscow). Electromagnetic Wave Diffraction on an Infinite Cylinder.

220-221

Mention is made of Fok, V. A.

Kuzmak, G. Ye. (Moscow). Asymptotic Solutions of Some Non-linear Differential Equations of Secondary Order With Variable Coefficients.

221-223

Card 74/80



13

5(4)  
AUTHORS: Bonch-Bruyevich, V.L., and Glasko, V.B. SOV/55-58-5-15/34  
TITLE: On the Theory of Chemical Adsorption on Metals (X teorii khimicheskoy adsorbtsii na metallakh)  
PERIODICAL: Vestnik Moskovskogo universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 5, pp 91 - 104 (USSR)  
ABSTRACT: In § 1 the following questions are asked : a.) What kind of variations in the energetic spectrum of a system are connected with the process of chemical adsorption ? b.) What kind of effects arise by the possible appearance of a surface charge ? The authors try to give a qualitative answer on these questions. § 2 contains the foundations of the investigation essentially published by Bonch-Bruyevich [Ref 7 - 10] . § 3 Deals with the investigation of the influence of the structure defects on the electronic spectrum of the metal. All metals are divided into two classes with respect to the given adsorbate (and equally all the atoms of the adsorbate with respect to the given metal). In one of them the adsorption is accompanied by the formation of local levels, so that the metal does not differ from a semiconductor in this sense. In the second class there takes place no

On the Theory of Chemical Adsorption on Metals

SOV/55-58-5-15/34

formation of levels, the chemically adsorbed material is on the surface in the form of relatively weakly bound ions. § 4 Contains the approximative data, obtained by means of the computing machine Strela, on the local levels of atoms similar to hydrogen which are in the metal. The qualitative results of § 3 are confirmed. The authors thank F.F. Vol'kenshteyn, G.Z. Roginskiy and A.N. Tikhonov for the interest in the present paper.

There are 18 references, 12 of which are Soviet, 3 American, 2 German, and 1 English.

ASSOCIATION: Kafedra poluprovodnikov i kafedra matematiki dlya fizicheskogo fakul'teta (Chair of Semiconductors and Chair of Mathematics of the Physics Department)

SUBMITTED: June 24, 1958

Card 2/2

24 (5)

AUTHORS

Glasko, L. B., Lerjust, F.,  
Terletskiy, Ya. P., Shushurin, S. F.

SOV/56 35-2 20/60

TITLE

Investigation of Particle-Like Solutions of a  
Nonlinear Scalar Field Equation (Issledovaniye  
chastitsepodobnykh resheniy nelineynogo uravneniya  
skalyarnogo polya)

PERIODICAL

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,  
Vol 35, Nr 2, pp 452-457 (USSR)

ABSTRACT

For the investigation of possibilities offered by the  
nonlinear field theory of elementary particles (Refs 1 - 9)  
an investigation of the particle-like solution (Ref 1) of the  
simplest nonlinear equation of the scalar complex field is  
of especial importance. Thus it is possible to find  
a qualitative solution of the problem of the existence  
and character of the mass spectrum. The authors proceed  
from the Lagrangian for a complex scalar field

$$\alpha = - \nabla \Psi^* \nabla \Psi + \frac{\partial \Psi^*}{\partial x_0} \frac{\partial \Psi}{\partial x_0} - m^2 \left[ \Psi^* \Psi + F(\Psi^* \Psi) \right]$$

Card 1/3

Investigation of Particle Like Solutions of a  
Nonlinear Scalar Field Equation

SOV/56-35-2 20/60

( $x_0 = ct$ ,  $F(v)$  - a determined nonlinear function,  $m$  - a  
parameter with the dimension of a reciprocal length)  
with the field equations

$$\nabla_0^2 \Psi - \partial^2 \Psi / \partial x_0^2 = m^2 \left[ 1 + F(\Psi^* \Psi) \right] \Psi = 0;$$

$$\nabla_0^2 \Psi^* - \partial^2 \Psi^* / \partial x_0^2 = m^2 \left[ 1 + F(\Psi^* \Psi) \right] \Psi^* = 0$$

where  $F'(v) = dF(v)/dv$

$E$  and  $Q$  are then written down as functions of  $\Psi$ ,  $\Psi^*$  and  
introduced.

$$\Psi = u(r) e^{iEx_0}, \quad \Psi^* = u(r) e^{-iEx_0}$$

( $E$  - parameter, proportional to a frequency), and  $E$  and  $Q$   
are given as functions of  $u$  and  $r$ . With  $F(v) = -\lambda v^2/2$ ,  $\eta = \sqrt{\lambda m} u$   
and  $\varrho = r \sqrt{m^2 - E^2}$ ,  $\eta$  and  $\varrho$  are introduced and with their  
aid the first three particle-like solutions are derived  
(See also figures 1 to 5). The relevant mass spectrum is  
obtained by numerical integration for the simplest cubic  
term. Under favorable physical conditions a finite spectrum

Card 1/3